**WORKSHEET – 2**

**IDEA EVALUATION WORKSHEET- Based on 5q by Prof.EdRubaesch**

Q1. WHAT’S THE PROBLEM?

1. IS IT REAL: yes the problem is a real one because it affects the railway station surroundings.
2. HOW BIG IS THE PROBLEM: The problem grows gradually if any action isn’t taken. It can affect everyone nearby the station by spreading up some type of disease or infection.
3. WHEN DOES IT OCCUR: Most of the people travel through trains in India, so it is quite common that the tracks get dirty everyday.
4. FREQUENCY OF OCCURRENCE: It may happen 10-15 times a day or more than that.
5. CURRENT SOLUTIONS: Most of the work is done by the ragpickers but then government came with a solution by introducing a huge machine which requires a lot of time to clean the tracks.

Q2. WHO HAS THE PROBLEM-customer identification

* PROFILE: Our initial customer is railway department of India.
* LIFESTYLE: It is intended to be used for social purpose.
* SEGMENT: Over the railway tracks inside the station.
* POSITION-CRITICALITY OF NEED: There is an urgent requirement of the proposed system because the dirt without cleaning grows rapidly.

Q3. WHAT’S YOUR SOLUTION

* WHATS YOUR UNIQUE PROPOSITION: Our team can up with an idea to clean the tracks with much easier way. The idea consists of sensors for detecting the obstacles and a vacuum cleaner for cleaning the dirt. It works mutually by shutting down device one time and vacuum cleaner the other to save the battery usage.
* DO YOU OWN IT- IPR: no we haven’t applied for the copyright yet.

Q4. WHO IS COMPETITION

* HOW ARE YOU DIFFERENT: There are some key points which differentiate our product from the existing methods:-
* Time taken
* Less Cost
* Portable
* Small Size
* ARE YOU THE UBER OR YOU UBERED: we are the uber.

Q5. HOW IS IT MADE POSSIBLE-

* RESOURCES/ TECHNOLOGY: we are using a system embedded with python code to move our device flexibly over the tracks controlling it through a remote controller.
* SOCIAL/ECOLOGICAL FEASABILTY: There is a need for the survey of social feasibility and ecological feasibility.
* Man, money, machine, materials: Estimated cost can be around 5000 INR and the materials are easily affordable from any hardware outlet.

IDEA EVALUATION- SUMUP

CUSTOMERS:

MOST UNDERSERVED SEGMENT

SIZE: The expected to be very small but the breadth of railway tracks.

TARGET: The target is successfully developing the prototype and uses it on the nearby railway station with all the legal permissions by the government.

COMPETITION

DIFFERENTIATOR: As our product is different from the other existing system in terms of size, cost, portability, it can be a successful product.

ECONOMIC FEASABILITY: Our stakeholders are the members from the railway department who can help build us this product. A survey is needed for the economic feasibility.

TECHNOLOGY NEEDED: the current technology used i.e. python embedded system but IOT can be a better replacement.

COMPETENCIES

KNOWLEDGE NEEDED: Must be thorough with all the hardware components and its working.

SKILLS NEEDED: programming and management skills.

TEAM COHESIVENESS: It is needed throughout the product development phases and at selling point.

NETWORK: There is an extreme need of connection with the railway department of India for all the updates and their demands.